

From the INTERNATIONAL BUREAU

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rules 44bis.3(c) and 72.2)

To:

SCHAUMBURG, Karl-Heinz  
Postfach 86 07 48  
81634 München  
ALLEMAGNE

**EINGEGANGEN**

18. Okt. 2006

**Erled.**Date of mailing (*day/month/year*)

12 October 2006 (12.10.2006)

Applicant's or agent's file reference

2004-0202 P

**IMPORTANT NOTIFICATION**

International application No.

PCT/EP2005/001174

International filing date (*day/month/year*)

04 February 2005 (04.02.2005)

Applicant

OCÉ PRINTING SYSTEMS GMBH et al

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

**2. Transmittal of the copy of the translation to the designated or elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

Yolaine Cussac

Facsimile No. +41 22 338 82 70

Facsimile No. +41 22 338 82 70

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 2004-0202 P	<b>FOR FURTHER ACTION</b> See item 4 below	
International application No. PCT/EP2005/001174	International filing date ( <i>day/month/year</i> ) 04 February 2005 (04.02.2005)	Priority date ( <i>day/month/year</i> ) 06 February 2004 (06.02.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant OCÉ PRINTING SYSTEMS GMBH		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input type="checkbox"/>            | Box No. II   | Priority  |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited   |
| <input checked="" type="checkbox"/> | Box No. VII  | Certain defects in the international application  |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application   |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 338 82 70	Date of issuance of this report 04 October 2006 (04.10.2006)
	Authorized officer  Yolaine Cussac  e-mail: pt11@wipo.int

# PATENT COOPERATION TREATY

TRANSLATION

From the  
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year) **See form PCT/ISA/210**

Applicant's or agent's file reference  
**2004-0202 P**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/EP2005/001174**

International filing date (day/month/year)

**04.02.2005**

Priority date (day/month/year)

**06.02.2004**

International Patent Classification (IPC) or both national classification and IPC

**G06K15/12, G03G9/00, G03G21/00, G03G15/00**

Applicant

**OCÉ PRINTING SYSTEMS GMBH**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/IEP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2005/001174

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item:  
☐ This opinion has been established on the basis of a translation from the original language into the following language  
\_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/EP2005/001174
--

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement																								
<p>1. Statement</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; vertical-align: top;">Novelty (N)</td> <td style="width: 5%;"></td> <td style="width: 40%; border-bottom: 1px solid black;">Claims 1-49</td> <td style="width: 25%; text-align: right;">YES</td> </tr> <tr> <td></td> <td></td> <td style="border-bottom: 1px solid black;">Claims</td> <td style="text-align: right;">NO</td> </tr> <tr> <td style="vertical-align: top;">Inventive step (IS)</td> <td></td> <td style="border-bottom: 1px solid black;">Claims 1-49</td> <td style="text-align: right;">YES</td> </tr> <tr> <td></td> <td></td> <td style="border-bottom: 1px solid black;">Claims</td> <td style="text-align: right;">NO</td> </tr> <tr> <td style="vertical-align: top;">Industrial applicability (IA)</td> <td></td> <td style="border-bottom: 1px solid black;">Claims 1-49</td> <td style="text-align: right;">YES</td> </tr> <tr> <td></td> <td></td> <td style="border-bottom: 1px solid black;">Claims</td> <td style="text-align: right;">NO</td> </tr> </table>		Novelty (N)		Claims 1-49	YES			Claims	NO	Inventive step (IS)		Claims 1-49	YES			Claims	NO	Industrial applicability (IA)		Claims 1-49	YES			Claims	NO
Novelty (N)		Claims 1-49	YES																						
		Claims	NO																						
Inventive step (IS)		Claims 1-49	YES																						
		Claims	NO																						
Industrial applicability (IA)		Claims 1-49	YES																						
		Claims	NO																						
<p>2. Citations and explanations:</p> <p>The following documents are cited:</p> <p>D1: DE 102 12 840</p> <p>D2: DE 199 00 164</p> <p>1. The application <b>relates</b> to an electrophotographic printer (or copier), that is to say a printer, in which toner is distributed on a photographic roll with the aid of a latent charge image. Here, colour printers comprise a plurality of developer stations for the toners of different colour. There is the <b>problem</b> here that, during printing operation with continuously low toner discharge (printed pages having few contents of a specific colour), the developer ages quickly and is damaged, that is to say is subject to wear in the developer station. The problem also exists in a black-and-white printer in the case of pages having few contents. If a developer station is not required for a relatively long time during printing operation, it is additionally subjected to unnecessary wear.</p> <p>The <b>solution</b> consists of avoiding the situation where a developer station has to produce pages having few contents during printing operation. To this end, in a</p>																									

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2005/001174

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

case of this type (that is to say when the toner discharge has been below a predefined value for a relatively long time),

a) a latent image of large surface area is produced (artificial toner throughput) which is, however, not printed onto the paper later at all,

b) and/or the mechanics of the developer station which has not been used for a relatively long time is switched off simply.

2. These two solutions are not rendered obvious by the available prior art. The citations do not even mention the problem on which the invention is based.

3. D1 ought to be the closest prior art. Said document discloses an electrophotographic colour printer having a photoconductor belt, the outer circumferential surface of which can be charged with latent charge images, and having two developer stations. The possibility of producing an artificial toner throughput or of switching one of the developer stations into the standby mode is not disclosed.

4. D2 likewise relates to a laser printer. Here, the normal printing process is interrupted every 2000 pages, in order to check the current developer conditions using a toner mark which is printed onto the photoconductor drum. D2 also does not concern itself with the problem that developer stations are damaged by long-term low toner discharge.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2005/001174

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

5. The independent claims are not drafted in the two-part form (PCT Rule 6.3(b), D1 is the closest prior art).

6. The prior art (D1, D2) is not recognized in the description (PCT Rule 5.1(a)).

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2005/001174

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

7. It is unclear in **claim 1** whether the word "which" in line 14 relates to the regeneration process or the printing process. In other words: are the steps in lines 14-21 carried out only under the condition mentioned in line 11? This is valid correspondingly for the remaining independent claims.

8. The application contains two independent method claims 1 and 14 and two independent product claims 26 and 38, with the result that the requirement for brevity is infringed.